A. CLASSIFICATION OF SUBJECT MATTER
INV. H04L9/08 H04L9/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

| C. DOCUM | ENTS CONSIDERED TO BE RELEVANT | | | | | | |
|-----------|--|-----------------------|--|--|--|--|--|
| Category* | Citation of document, with Indication, where appropriate, of the relevant passages | Relevant to claim No. | | | | | |
| Y | US 2004/103281 A1 (BRICKELL ERNIE F) 27 May 2004 (2004-05-27) cited in the application the whole document | | | | | | |
| Υ | MENEZES, VANSTONE, OORSCHOT: "Handbook of Applied Cryptography" 1997, MENEZES, VANSTONE, OORSCHOT, USA, XP002394428 page 321 - page 322 page 330 - page 331 page 388 - page 390 page 394 - page 395 page 397 - page 398 page 472 page 515 - page 516 page 548 - page 552 | 1-45 | | | | | |

| X | Further documents are listed in the | continuation of Box C. |
|---|-------------------------------------|------------------------|
|---|-------------------------------------|------------------------|

X See patent family annex.

- * Special categories of cited documents :
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filling date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

18/09/2006

11 August 2006

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentiaan 2

NL - 2280 HV Rijswijk

Tel. (+31-70) 340-2040, Tx, 31 651 epo ni,

Fax: (+31-70) 340-3016

Authorized officer

San Millán Maeso, J

Date of mailing of the international search report

| - EU. U. U.J.E. UU.J./ U.E.4.E.D.J | PCT | /US2005, | /024253 |
|------------------------------------|-----|----------|---------|
|------------------------------------|-----|----------|---------|

| C(Continu | ation). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|-----------|--|---|-----------------------|
| ategory* | Citation of document, with indication, where appropriate, of the relevant passages | F | Relevant to claim No. |
| A | US 6 032 260 A (SASMAZEL ET AL) 29 February 2000 (2000-02-29) abstract column 2 - column 3 | | 1-45 |
| | | | |

| | | Informa | nation on patent family members | | | PCT/US2005/024253 | |
|-------------|-------------|---------|---------------------------------|----------------------------|--|-------------------|---|
| Patent docu | | | Publication date | | Patent family member(s) | | Publication date |
| US 20041 | 03281 | A1 | 27-05-2004 | AU CN EP JP WO | 2003287567 1717895 1566011 2006508608 2004051923 | A A1 T | 23-06-2004 04-01-2006 24-08-2005 09-03-2006 17-06-2004 |
| US 60322 | | Α | 29-02-2000 | NONE | | , | الله المنظم |

From the INTERNATIONAL SEARCHING AUTHORITY

| То: | | | | PCT | | |
|--|--|--------------------------------------|--|---|--|--|
| see form PCT/ISA/220 | | | | WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORIT | | |
| | | | | | (PCT Rule 43 <i>bis</i> .1) | |
| | | | | Date of mailing (day/month/year) | see form PCT/ISA/210 (second sheet) | |
| | olicant's or agent's fil e form PCT/ISA/2 | | | FOR FURTHER See paragraph 2 be | | |
| International application No. PCT/US2005/024253 | | | International filing date (d 08.07.2005 | l day/month/year) | Priority date (day/month/year) 14.07,2004 | |
| Inte IN\ | rnational Patent Clast V. H04L9/08 H04 | ssification (IPC) or L9/32 | both national classification a | and IPC | | |
| | olicant FEL CORPORAT | TON | | | | |
| 1. | This opinion co | ontains indicatio | ons relating to the follo | wing items: | | |
| | ☑ Box No. I | Basis of the op | inion | | | |
| | ☐ Box No. II | Priority | | | | |
| | ☐ Box No. III | Non-establishm | nent of opinion with regar | rd to novelty, inventi | ve step and industrial applicability | |
| | ☐ Box No. IV | Lack of unity of | invention | | | |
| | ⊠ Box No. V | Reasoned state applicability; cit | ement under Rule 43 <i>bis.</i> ations and explanations | 1(a)(i) with regard to supporting such sta | novelty, inventive step or industrial tement | |
| | ☐ Box No. VI | Certain docume | | • | | |
| | ☐ Box No. VII | | in the international appli | | | |
| | ☐ Box No. VIII Certain observations on the international application | | | | | |
| 2. | FURTHER ACTI | ON | | | | |
| | the applicant cho | oses an Authorit eau under Rule 6 | I Preliminary Examining . | Authority ("IPEA") e | l usually be considered to be a xcept that this does not apply where chosen IPEA has notifed the tional Searching Authority | |
| | | nailing of Form F | | | PEA, the applicant is invited to interest. The applicant is invited to invite applicant invited invite | |
| | For further option | s, see Form PC1 | MSA/220. | | | |
| 3. | For further details | s, see notes to Fo | orm PCT/ISA/220. | | | |
| | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | | | | | |
| Vame | and mailing address | of the ISA | Date of com | | | |

European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840

Date of completion of this opinion

see form PCT/ISA/210 **Authorized Officer**

SAN MILLAN MAESO, J

Telephone No. +49 30 25901-477



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

1

International application No. PCT/US2005/024253

| | ox N | In I Project the anisis |
|--------|-----------|--|
| | | |
| 1. V | Vith r | egard to the language, this opinion has been established on the basis of: |
| × | 1 th | e international application in the language in which it was filed |
| | l a pı | translation of the international application into , which is the language of a translation furnished for the urposes of international search (Rules 12.3(a) and 23.1 (b)). |
| 2. W | ith re | egard to any nucleotide and/or amino acid sequence disclosed in the international application and sary to the claimed invention, this opinion has been established on the basis of: |
| a. | type | of material: |
| | | a sequence listing |
| | | table(s) related to the sequence listing |
| b. | form | at of material: |
| | | on paper |
| | | in electronic form |
| c. | time | of filing/furnishing: |
| | | contained in the international application as filed. |
| | | filed together with the international application in electronic form. |
| | | furnished subsequently to this Authority for the purposes of search. |
| 3. 🗆 | cop | addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto been filed or furnished, the required statements that the information in the subsequent or additional bies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished. |
| I. Add | dition | nal comments: |

Form PCT/ISA/237 (April 2005)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2005/024253

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-45

No: Claims

Inventive step (IS)

Yes: Claims

No: Claims

1-45

Industrial applicability (IA)

Yes: Claims

1-45

No: Claims

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1. Reference is made to the following documents:
 - D1: MENEZES, VANSTONE, OORSCHOT: 1997, CRC PRESS LLC , USA , XP002394263
 - D2: US 2004/103281 A1 (BRICKELL ERNIE F) 27 May 2004 (2004-05-27) cited in the application
- 2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-45 does not involve an inventive step in the sense of Article 33(3) PCT.
- 2.1. Independent claim 1
- 2.1.1. D1 consists of citations from the "Handbook of Applied Cryptography" which is a wellknown textbook in the field of cryptography and discloses:
- (pages 321, 322, 330 and 472) generating an encrypted data structure associated with a device, the encrypted data structure comprising a private key and a private key digest;
- (pages 397 and 398) generating an identifier, based on a pseudo-randomly generated value, for the encrypted data structure;
- (page 472) storing the identifier and the encrypted data structure in a signed group record on a removable storage medium; and
- (pages 397 and 398) storing the pseudo-random value and a group number corresponding to the signed group record into non-volatile storage within the device.
- 2.1.2. Thus independent claim 1 cannot be considered as involving an inventive step because it would be obvious (see PCT International Search and Examination Guidelines, Chapter 13, Paragraph 13.13) for the skilled man to combine the technical features of D1 together and other well-known technical features and/or design options in order to arrive at the subjectmatter of claim 1.

PCT/US2005/024253

2.2. Independent claims 14, 25 and 36

The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claims 14, 25 and 36, which therefore are also considered not inventive.

2.3. Dependent claims 2-13, 15-24, 26-35 and 37-45

The features included in the above-mentioned dependent claims as far as they are not disclosed by D1 and/or D2 correspond to design options or are well-known in the field of Cryptography. It would therefore be obvious (see PCT International Search and Examination Guidelines, Chapter 13, Paragraph 13.13) for the skilled man to combine the teachings of D1 and D2 in order to arrive at the subject-matter of the dependent claims.

Therefore the subject-matter of claims 1-45 is not considered inventive in the sense of Article 33(3) PCT.

3. It is not at present apparent which part of the application could serve as a basis for a new, allowable claim.